CRYOSURGICAL TREATMENT OF BENIGNANT LESIONS OF THE HEAD

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The question of treatment of benignant neoplasmas (BN) in the region of the head in spite of the numerous literature data is still unsufficiently studied. The main task of treatment is to replace or at least reduce the tumour mass with an additionally effective cosmetic result. Most oftenly are applied: surgical excision with aftercoming skin plastic operation, cauterisation, ligation for obliteration, etc. (1, 2).

The application of the cryosurgery in the treatment of BN is possible due to the methods of a precise initial determination and controlling of the outlines of the cryolesion according to the known physical laws of thermoconduction and heat-loss, reversability of the process, bloodless take-off of the necrotical tissue, full reepithelisation of the epithelium without formation of rough cicatrices (3).

Based on the experimental results (3, 4) we applied cryosurgical treatment to 37 patients (Table 1). 5 of them had cavernasical haemangiomas, 2 —

Table 1

Results of the cryosurgical treatment of BN

Diagnosis	Patients		
	treated	cured	percent
Haemangiomas	11	8	72.72
Pharyngeal papillomas	8	8	100.00
Atheromas	7	7	100.00
Pigment naevuses (facial)	4	4	100.00
Pyogenic granullomas	2	2	100.00
Nasal septal haemorrhage polyps	2	2	100.00
Recidivating herpes simplex	2	2	100.00
Cyst in recessus tonsillaris	1	1	100.00
TOTAL	37	34	91.62

in the posterial pharyngeal wall, 1 — in the tongue, the rest — on the face (fig. 1, 2, 3). The atheromas were located in the region of the ear (lowest part) or face, while the papillomas — on the frontal tonsillar arc or greater part of mesopharynx and hypopharynx. The patients were subjected before that to a surgical treatment (including ligation of A. carotis ext. — Patient V. N. A., age 50, CR N. 16237/77, diagnosis: haemangioma linguae), but later there were registered recidivations. The patients under our study were aged between 4 and 60 years.

The cryo-method was applied to patients with whom surgical interventions were contraindicated; some of them were either very old or they had no satisfactory effect from previously applied methods of other treatment.

Fig. 1

The treatment was usually performed ambulatorily, without anaesthesis with the facial tumours and with a local (spray) anaesthesis — nasopharyn

Fig. 2

geal cavity and pharynx. In the course of the cryo-treatment the patient is sitting on a chair comfortably leaning his head. The treatment itself was applied by cryo-apparatus, our project (4). The application was either a con tact

one or an injection one (with large lesions), repeated twice for a period of $1^1/_2$—4 minutes. The second approach of our method includes maximum 1—2 mm of the healthy tissue. In order to preserve the surrounding tissue we apply vaseline or use "The appliance for larger cryonecrosis and protection of surrounding tissues" (5).

Fig. 3

Results of the applied treatment: All patients with BN on the head stand and bear well the freezing effect without an expressed discomfort, even when no anaesthesis was used. As for the treated regions, immediately after the procedure we registered erythema, oedema, vesicular disorders with different duration — 2—5 days; this refered the haemangiomas most of all. Certain pain was reported usually either in the course of the first cryo-application or 2—5 days later, specially in the nasopharyngeal cavity. Bleeding was not established neither after the cryo-applications nor after the take-off of the necrotical tissue.

Total distruction of the facial haemangiomas was registered with 2 patients after the applied 2 cryo-procedures. When the necrotic tissue fell there was no pigmentation of the skin (fig. 1-c) with slightly visible tender cicatrix. The rest patients were subjected to only one cryo-application and the result was not a total distruction of the lesion.

The effect upon the other patients was also satisfactory. No cicatrices and deformations were registered for a period of 1—3 years after the treatment. No recidivations were reported too. The percent of the cured patients varied from 72.72% to 100% (Table 1).

Conclusions: 1) The possibility of bloodless application of surgical intervention and no rough cicatrices after treatment with cryosurgical method allows its practical usage in the treatment of BN on the head. 2) The cryodistruction is a selective method of the treatment of: tumours with excess bleeding, tumours located in places with a difficult direct approach for surgical excision, tumours in the facial region where there is a necessity of a cosmetic affect.

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КРИОХИРУРГИЧЕСКОЕ ЛЕЧЕНИЕ ДОБРОКАЧЕСТВЕННЫХ ЛЕЗИЙ ГОЛОВЫ

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РЕЗЮМЕ

Применено криохирургическое лечение 37 больных с доброкачественными опухолями ОРЛ органов. Было использовано контактное воздействие или воздействие шприцем. Проводилась двухразовая криоэкспозиция в течение 1,5—4 минут. Делается вывод, что возможность бескровной хирургической интервенции, отсутствие грубых рубцовых изменений и понижение степени дискомфорта позволяют применение криогенного метода при лечении доброкачественных опухолей головы.